TAKE SOUND METER

a. The film transport.

(1) The right film.

(a) Extensive scratching and film adherence to the platen was occuring. This was caused by the film rubbing on the underside of the raised top glass platen. Additionally, an extreme electrostatic charge was being built-up between the glass platens by this rubbing. This deficiency has been cured by the undersign's designing and the shop's fabricating a new set of brackets to reposition the rear film roller to enable it to guide the film between the two platens. This roller was required to be lowered 0.237 inches! OVERRUN

(2) Both transports are extremely noisy. It is suspected that the noise is generated from a number of sources such as the motor, the clutch/brake unit, the gear transmission and the film guide rollers. Specifically, the sound level is increased from ambient levels of 42db, 51db and 58db on the As, Bs, and Cs meter scales respectively to 89db on all scales. NO NOISE SPEC BUT STILL CONSIDER AN OVERRUN

STAT

Measurements were made for the roller noise alone and the left set increased the ambient level of 58db on the Cs scale to 82db. A comparison with the [redacted] motorized transports indicate that they only increase the ambient noise levels 22db, 19db, and 12db respectively on the As, Bs and Cs scales. In addition to the noise problem, it was found that the transport system does not supply enough power to the spools. Neither transport will wind film unto a fully loaded 9.5 inch reel. This is a specific failure of the contract "specifications."

DOESN'T MEET SPEC'S OVERALL

b. Light Sources

(1) Brightness. The maximum brightness of the general illumination was found to be only 1300 ft. lamberts. The contract specifically states that 1700 ft. lamberts is required. Furthermore, at this maximum intensity level only 800 ft. lamberts illuminates the corners of the lighted area. This is a drop of over 60%--the contract only allowed a maximum intensity variation of 10%. At the lowest illumination setting there is perceivable flicker; another failure of the contractual terms.

WOULD TRY TO ACHIEVE 3500-4500 FT-LAMBERTS BUT WOULD BE A C.I.S.

(2) Noise. There is a significant light source buzz evident in both the cold cathode grids.

(3) The HIgh Intensity Light Source. Although the High Intensity Light Source is significantly brighter than the cold cathode grid, the color of the light is very yellow. In addition, preliminary tests indicate that the Versatile Stereoviewer is capable of a higher resolving capability with the lower intensity white cold-cathode light source than with the yellow high intensity source. Furthermore, the high intensity source has been poorly implemented. Although the concept of tracking magnets was attractive, they had to be too large in order to achieve the magnetic flux required for proper tracking betwe-n the large spacing of the master and slave magnets necessitated by the raising cover glass platen. As a consequence, the

tracking ability is only marginal and the slave magnet (that one attached to the fibre optic cable) interferes with the general illumination masking shade. The master magnet assembly restricts the motion of the stereoscope's rhomboids, whereby, all rhomboid positions cannot be conviently achieved.

c. The four extrusions on the microscope transport casting interfere with the upper glass platen when it is completely raised. NEED TO BE CUT OFF OVERRUN

d. More film guides need to be added to enable the leading edge of the film to be easily positioned between the two glass platens during loading. OVERRUN

e. The clutch brake units on the film spools are applied when power is applied to the instrument. This makes loading the film difficult. MINOR C.I.S.

f. There are many sharp corners on the instrument. OVERRUN UNDER HUMAN ENGINEERING

g. Alignment of eyepiece extension

635 LIGHT TABLE

OVERRUN OF [redacted] STAT

CHANGE OF CAMP GRID 3000 FT-LAMB

MIS. REWORK [redacted] STAT

CHANGE-IN-SCOPE

→ FILM DRIVE NOISE

MATSU POLAROID

MISS. ITEMS [redacted] STAT

14-15 WKS

14 SEPT

1. 635 LIGHT TABLE

A. NOISE LEVEL ABSOLUTE GOAL 10db above ambient
20db MAXIMUM ACCEPTABLE

$A_5 = 58$ B. 3500 FT-LAMB. ~~BRGS.~~

$B_5 = 66$ C. WHEN ← 2WKS ~~ARE~~ AFTER REC. OF EQ.

$C_5 = 71$ D. CALL Re RETURN TIME

STAT

CALL ARMY Re ~~SP~~ TIME TO FIX MACHINE

10 MM

1. THE VIEWING ANGLE WILL BE ~~30°~~ 35° (PER DRAWING)
2. THERE WILL BE NO FIELD REDUCTION
3. THE CONVERGENT ANGLE WILL BE SAME AS MICROSCOPE AND ~~BUT~~ INTERPUPILARY DISTANCE VARIATION WILL NOT BE REDUCED.